

interspersed throughout the text in a very pertinent and pleasing manner. It is evident that much thought has been given to the layout and design of this fine biography.—*Linny Heagy, Linny/Designer, Illustrator, Arlington, TX, U.S.A., a0005835@airmail.net.*

DANIEL W. GADE. 1999. **Nature and Culture in the Andes.** (ISBN 0-299-16124-2, pbk.). University of Wisconsin Press, 2537 Daniels St., Madison, WI, 53718, U.S.A. \$18.95, 298 pp, 46 figures, 6" × 9".

The thrust of this volume is what the author refers to as the *nature/culture gestalt*. And throughout this work he proves that this is more than just an attempt at neologism; it is, in fact, a reality of the Andean region. The nature/culture gestalt is "a mutually interactive skein of human and nonhuman components, rather than opposing polarities or separate entities": Pg. 5. The Western penchant of categorization tends to separate these two seemingly unrelated phenomena, whereby the interrelatedness is lost and questions are only partially answered. Cultural geographer and professor emeritus at the University of Vermont, Daniel W. Gade delivers a groundbreaking volume for the annals of Andean history, ecology, and ethnobiology. *Nature and Culture in the Andes* is a book with a holistic vision that attempts to broaden the perspective achieved solely by objective scientific methods of inquiry.

The ten chapters include an introduction and conclusion laced with a self-reflexive commentary on the author's observations of Andean culture throughout his years of fieldwork. The main chapters themselves are free of the author's self-reflexive voice, but are framed within the concepts that are a result of his own self-reflection. In the introductory chapter, references are made to everyone from Goethe to Nietzsche and the author provides an autobiographical discussion that frames his insights and perspectives on the geographically and culturally diverse region of Andean South America. The second chapter, "Andean Definitions and the Meaning of *lo Andino*," covers the various meanings behind the term *the Andes*, geographically and culturally, and seeks to revise these definitions with his own. As the author states, "Over the past 400 years the definition of *the Andes* has shifted twice; from a nonregion to a region, and from a physical entity to a cultural area": Pg. 41.

The third chapter, "Deforestation and Reforestation of the Central Andean Highlands," is a chapter that stands out for several reasons. The common perspective of the Andes is one of a vast treeless region. Contrary to popular belief, the treeless Andes are actually a result of the economic demand for wood and subsequent deforestation. The author also discusses the role of anthropogenic fire and its role in environmental management. Fire was also used along the Pacific Northwest regions of North America (Boyd 1999); however, European colonists there frowned on its use, and the result being what many today perceive as the forest primeval, when in actuality the current tree population is relatively new. In the Andes, the author shows that fire management was *encouraged* by European settlers, the result being the treeless Andes as we know it. Various species of *Eucalyptus* were introduced to the region and replaced to some extent the species lost. The author goes on to offer 42 plant species, primarily at the genus level, that once covered the Andean highlands of Bolivia, Ecuador, and Peru. Tree removal was also a result of opening up more land for agriculture. As a result of population pressure, more and more trees were removed and this eventually led to environmental deterioration. However, without more land settled life would be limited in most regions.

The fourth chapter, "Malaria and Settlement Retrogression in Mizque, Bolivia," discusses the disease ecology of malaria in various elevations in the Andes and the pathogens introduced by European settlement. The author's case study provides a context for discussion whereby one of the largest and most virulent malaria histories in the region of western South America is brought to light through migration, population density, and racial/ethnic change. Chapter five, "The Andes as a Dairyless

Civilization: *Llamas and Alpacas as Unmilked Animals*," continues in the spirit of debunking the traditional anthropological assumption that milk bearing animals are always milked. Chapter six, "Epilepsy, Magic, and the Tapir in Andean America," discusses the relationship of controlling epileptic seizures by wearing the nail of tapir around ones neck. Chapter seven, "Valleys of Mystery on the Peruvian Jungle Margin and the Inca Coca Connection," discusses how the popular assumption that the Incas did not cultivate coca has not properly been challenged. Chapter eight, "Guayaquil as Rat City," discusses the inundation of brown and black rats in this port city in Ecuador. Arriving as a result of overseas travelers, rats have played an undeniable role in the health and demographic patterns of Guayaquil. In the early 1900's the bubonic plague wreaked havoc upon Guayaquil, and was due in no small part to the co-existence of rats and humans and was squelched by a major public sanitation campaign. However, rats remain in the urban Guayaquil scavenging on trash left by humans. Going beyond mere causation is a metaphorical significance, "...rats symbolize the port function and external connections... rats also reflect Guayaquil's failure as a civic entity...(and) also represent local poverty": Pg. 183. Chapter nine, "Carl Sauer and the Andean Nexus in New World Diversity," covers the life work of Carl Sauer's studies in New World plant domestication and biodiversity.

Due not only to its diversity, but also its theoretical scope, this book would be a valuable part of any course in Andean Ethnobiology. Covering several overlapping ethnobiological concerns in botany, ecology, geography, and public health, this text seeks to fuse together nature and culture in a series of erudite arguments. Moreover, this is lively and interesting reading that dismisses ideas long held about the pre-Columbian Andean environment and human/environment relationships and seeks to replace them with ideas that could only be the result of rigorous research and a long career in the field. Perfect for graduate level classes in anthropology or geography, *Nature and Culture in the Andes* is bold, scholarly, and inexpensive. I would highly recommend this book to departments focusing in Latin American and Andean studies. Daniel Gade succeeds in defending his *nature/culture gestalt* theory in central South America and sets a level of scholarship to be modeled by current and future students of Ethnobiology.—Kevin D. Janni, *Botanical Research Institute of Texas, Fort Worth, TX 76102-4060 U.S.A., kjanni@brit.org*.

#### REFERENCE

BOYD, R. (ed.) 1999. *Indians, fire, & the land in the Pacific Northwest*. Oregon State University Press. Corvallis, Oregon.

ESTELLE LEVETIN and KAREN MCMAHON. 1999. **Plants and Society. Second Edition.** (ISBN 0-697-34552-1, pbk.). WCB/McGraw-Hill, Dubuque, IA, U.S.A. (Orders: [www.mhhe.com](http://www.mhhe.com)). \$55.60, 477 pp, b&w photos, 8 1/2" × 11".

*Plants and Society* is not unlike other high school/graduate level texts that have come out in the last two years and have attempted to present botany as an important aspect to human life, rather than an esoteric scientific discipline with little applicability. However, other texts have focused heavily on the cultural aspects of plant use, where this text uses historical examples to punctuate its scientific discussions.

The book comes in twenty-five chapters grouped in seven units. This first nine chapters cover the basic botany found in introductory courses, the rest of the book either looks at the applied aspects of botany or the historical impact of the relationship between people and plants. Unit one, "the botanical connection to our lives," covers flowering plants, fungi, an overview of the plant sciences and a general discussion of phytochemistry. Unit two is made up of eight chapters of introductory